## THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today

- (1) was not written for publication in a law journal and
- (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Appeal No. 96-2457 Application 08/171,149<sup>1</sup>

ON BRIEF

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Before MEISTER, FRANKFORT and McQUADE, <u>Administrative Patent</u> <u>Judges</u>.

FRANKFORT, Administrative Patent Judge.

<sup>&</sup>lt;sup>1</sup> Application for patent filed December 21, 1993.

## DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 9 and 11 through 16, which are all of the claims remaining in this application. Claim 10 has been canceled.<sup>2</sup>

Appellants' invention relates to a centrifugal fan having a slidably adjustable cutoff faring (32) located at, and selectively positionable within, the exit port of the fan housing for varying the area of the exit port such that the efficiency of the centrifugal fan can be varied to match the output efficiency of the fan to the desired air mass flow through an associated air delivery system. The invention also addresses a method of optimizing the performance characteristics of a specific centrifugal fan for various air mass flow rates. Claims 1, 8 and 14 are representative of the subject matter on appeal and a copy of these claims may be found in the Appendix to appellants' brief.

<sup>&</sup>lt;sup>2</sup> Claim 15 was amended subsequent to the final rejection in a paper filed March 13, 1995 (Paper No. 6).

The prior art references of record relied upon by the examiner in rejections of the appealed claims are:

Murphy	2,951,630	Sept.	6,	1960
Wood	3,191,851	June	29,	1965
Kang	5,092,136	Mar.	3,	1992

Claims 1, 2, 8, 9, 11, 12, 14 and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Murphy in view of Kang.

Claims 3 through 7, 13 and 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Murphy in view of Kang as applied above, and further in view of Wood.

Rather than reiterate the examiner's full explanation of the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellants regarding those rejections, we make reference to the examiner's answer (Paper No. 11, mailed August 29, 1995) for the examiner's reasoning in support of the rejections, and to appellants' brief (Paper No.

10, filed July 10, 1995) and reply brief (Paper No. 12, filed October 16, 1995) for appellants' arguments thereagainst.

## **OPINION**

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of this review, we have made the determination that the examiner's rejections under 35 U.S.C. § 103 will not be sustained. Our reasons follow.

Turning first to the examiner's rejection of appealed claims 1, 2, 8, 9, 11, 12, 14 and 16 based on Murphy in view of Kang, we must agree with appellants that there is no teaching, suggestion or incentive in the applied references to justify the examiner's selective reconstruction of the centrifugal fan of Murphy by replacing the pivoted cutoff sheet (26) therein with a cutoff member that is slidable along the interior surface of the scroll housing of the fan and operable to vary the area of the

exit port or outlet (15). This is particularly so given the interconnection at (28) between the pivoted cutoff sheet (26) and the moveable inlet conduit (22) of Murphy which is intended to ensure desired coordinated movement of these two components in

that fan system. The shutter (15) of Kang which is used to close the passage (7) therein when the refrigerating compartment to which it is attached is not in use, and to thereby eliminate the negative effects of induced vortex flow on the fan (5) of the system, has little or nothing to do with the centrifugal fan of Murphy. In our opinion, the present combination is based entirely on impermissible hindsight derived from appellants' own teachings and not from the prior art references themselves as the teachings thereof would have been fairly understood by one of ordinary skill in the art at the time of appellants' invention.

Regarding the examiner's logic in support of the rejections on pages 3 and 4 of the answer, we observe that a combination of elements is not obvious merely because each of the elements is individually known in a related field of art and may

be found in an analogous (i.e., fan) device. Lacking any reasonable teachings in the prior art itself which would appear to have fairly suggested the claimed subject matter as a whole to a person of ordinary skill in the art, or any viable line of reasoning as to why such artisan would have otherwise found the claimed subject matter to have been obvious in light of the

teachings of the applied references, we must refuse to sustain the examiner's rejection of claims 1, 2, 8, 9, 11, 12, 14 and 16 under 35 U.S.C. § 103 based on Murphy and Kang.

The examiner's addition of the reference to Wood in the rejection of claims 3 through 7, 13 and 15 under 35 U.S.C. § 103 only compounds the problem by further relying on impermissible hindsight to make such combination, and does nothing to supply that which is lacking in the teachings and/or suggestions of the basic combination of references as noted above. More specifically, we note that the rolled-over portion of the cutoff sheet (20) about the rod (23) in Wood, which the examiner considers to be a "lip," is used to secure that end of the cutoff sheet in position between the fan housing walls (11, 12). Given

the movable nature of the pivoted cutoff sheet (26) in Murphy and/or the shutter (15) of Kang, there would appear to be no reason why one of ordinary skill in the art would even consider fixing the inner end of the cutoff sheet in Murphy or shutter of Kang in the manner suggested in Wood. Accordingly, the rejection of claims 3 through 7, 13 and 15 under 35 U.S.C. § 103 will likewise not be sustained.

In light of the foregoing, the decision of the examiner is reversed.

## **REVERSED**

JAMES M. MEISTER

Administrative Patent Judge

BOARD OF PATENT

CHARLES E. FRANKFORT

Administrative Patent Judge

JOHN P. McQUADE

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